

2.0 SUMMARY OF THE ALTERNATIVES

The following alternatives represent the range of options NOAA Fisheries considered to reduce the incidental catch and bycatch mortality of sea turtles in the pelagic longline fishery for Atlantic HMS. The alternatives range from no action to a total prohibition of the gear type. Alternatives A3, A10, and A16 are currently preferred. Alternatives A6, A11, and A12 were considered but not further analyzed. The ecological, economic, and social impacts of the other alternatives are discussed in later chapters.

2.1 BYCATCH AND BYCATCH MORTALITY MITIGATION MEASURES

Alternative A1 Maintain existing hook and bait restrictions in the Atlantic pelagic longline fishery; maintain existing time/area closures in the Atlantic pelagic longline fishery; maintain existing possession and use requirements for bycatch mitigation gear (dipnets and line clippers), as well as sea turtle handling and release guidelines, as currently specified by NOAA Fisheries. (No Action)

This alternative would maintain existing regulations regarding Atlantic pelagic longline gear and sea turtle interactions, including the closure of the Northeast Distant Statistical Reporting Area (NED) (20° to 60° West longitude, 35° to 55° North latitude) to all federally permitted vessels, or vessels required to be permitted, for Atlantic HMS with pelagic longline gear on board.

Alternative A2 Limit vessels with pelagic longline gear onboard, at all times, in all areas open to pelagic longline fishing excluding the NED, to possessing onboard and/or using only 18/0 or larger circle hooks with an offset not to exceed 10 degrees and mackerel bait.

This alternative would limit vessel operators participating in the pelagic longline fishery for Atlantic HMS operating outside of the NED, at all times, to possessing and/or using only 18/0 or larger circle hooks with an offset not to exceed 10 degrees. Vessel operators aboard such vessels would be allowed to possess and/or use only mackerel bait. This alternative would maintain the current requirement for possession or use of non-stainless steel corrodible hooks, and the live-bait restriction in the western Gulf of Mexico for vessels participating in this fishery.

Alternative A3 *Limit vessels with pelagic longline gear onboard, at all times, in all areas open to pelagic longline fishing excluding the NED, to possessing onboard and/or using only one of the following combinations: i) 18/0 or larger circle hooks with an offset not to exceed 10 degrees and mackerel bait; **OR** ii) 18/0 or larger non-offset (flat) circle hooks and squid bait. (Preferred Alternative)*

This alternative would limit vessel operators participating in the pelagic longline fishery for Atlantic HMS operating outside of the NED, at all times, to possessing and/or using no more than one of the following hook and bait combinations: i) 18/0 or larger circle hooks with an offset not to exceed 10 degrees and mackerel bait; **OR** ii) 18/0 or larger non-offset (flat) circle hooks and squid bait. This alternative would maintain the current requirement for possession or use of non-stainless steel corrodible hooks, and the live-bait restriction in the western Gulf of Mexico for vessels participating in this fishery.

Alternative A4 _____ Limit vessels with pelagic longline gear onboard, at all times, in all areas open to pelagic longline fishing excluding the NED, to possessing onboard and/or using only one of the following combinations: i) 18/0 or larger circle hook with an offset not to exceed 10 degrees and mackerel bait; **OR** ii) 18/0 or larger non-offset circle hooks and squid bait; **OR** iii) 9/0 “J”-hooks with an offset not to exceed 25 degrees and mackerel bait.

This alternative would limit vessel operators participating in the pelagic longline fishery for Atlantic HMS operating outside of the NED, at all times, to possessing and/or using no more than one of the following hook and bait combinations: i) 18/0 or larger circle hooks with an offset not to exceed 10 degrees and mackerel bait; **OR** ii) 18/0 or larger non-offset circle hooks and squid bait; **OR** iii) 9/0 “J”-hook with an offset not to exceed 25 degrees and mackerel bait. This alternative would maintain the current requirement for possession or use of non-stainless steel corrodible hooks, and the live-bait restriction in the western Gulf of Mexico for vessels participating in this fishery.

Alternative A5 _____ Limit vessels with pelagic longline gear onboard, at all times, in all areas open to pelagic longline fishing excluding the NED, to possessing onboard and/or using only 16/0 or larger circle hooks with an offset not to exceed 10 degrees.

This alternative would limit vessel operators participating in the pelagic longline fishery for Atlantic HMS operating outside of the NED, at all times, to possessing and/or using only 16/0 or larger circle hooks with an offset not to exceed 10 degrees. This alternative would maintain the current requirement for possession or use of non-stainless steel corrodible hooks, and the live-bait restriction in the western Gulf of Mexico for vessels participating in this fishery. This alternative by itself would not sufficiently reduce sea turtle interactions. However, if used in combination with hook and bait requirements in the NED as analyzed in alternative A7 and certain time/area closures examined in this document (alternative A14 or A15), necessary reductions in sea turtle interactions may be achieved.

Alternative A6 _____ Allow pelagic longline fishing for Atlantic HMS in the NED, maintaining existing hook restrictions.

This alternative would re-open the NED to pelagic longline fishing for Atlantic HMS and maintain existing hook restrictions. The NED area was closed to pelagic longline fishing to reduce sea turtle interactions, and was the subject of a three-year research experiment investigating sea turtle mitigation measures. The re-opening of this area without implementation of additional sea turtle mitigation measures, as verified in the research experiment, would result in increased sea turtle interactions that would likely result in this fishery exceeding the incidental take levels established in the June 14, 2001, BiOp. This alternative does not meet NS 9 under the Magnuson-Stevens Fishery Conservation and Management Act (MSA), which requires NOAA Fisheries to minimize bycatch and bycatch mortality to the extent practicable. Therefore, this alternative is not further analyzed in this rulemaking but may be considered, if appropriate and necessary, in a future rulemaking.

Alternative A7 Open the NED to pelagic longline fishing and limit vessels with pelagic longline gear onboard in that area, at all times, to possessing onboard and/or using only 18/0 or larger circle hooks with an offset not to exceed 10 degrees and mackerel bait.

This alternative would re-open the NED to pelagic longline fishing for Atlantic HMS and limit vessels with pelagic longline gear onboard in that area, at all times, to possessing and/or using only 18/0 or larger circle hooks with an offset not to exceed 10 degrees and mackerel bait. This alternative would maintain the current requirement for possession or use of non-stainless steel corrodible hooks for vessels participating in this fishery.

Alternative A8 Open the NED to pelagic longline fishing and limit vessels with pelagic longline gear onboard in that area, at all times, to possessing onboard and/or using only 20/0 or larger circle hooks with an offset not to exceed 10 degrees and mackerel bait.

This alternative would re-open the NED to pelagic longline fishing for Atlantic HMS and limit vessels with pelagic longline gear onboard in that area, at all times, to possessing and/or using only 20/0 or larger circle hooks with an offset not to exceed 10 degrees and mackerel bait. This alternative would maintain the current requirement for possession or use of non-stainless steel corrodible hooks for vessels participating in this fishery.

Alternative A9 Open the NED to pelagic longline fishing and limit vessels with pelagic longline gear onboard in that area, at all times, to possessing onboard and/or using only one of the following combinations: i) 9/0 “J”-hook with an offset not to exceed 25 degrees and mackerel bait; **OR** ii) 18/0 or larger circle hook with an offset not to exceed 10 degrees with mackerel bait.

This alternative would re-open the NED statistical area to pelagic longline fishing for Atlantic HMS and limit vessels with pelagic longline gear onboard in that area, at all times, to possessing and/or using no more than one of the following hook and bait combinations: i) 9/0 “J”-hook with

an offset not to exceed 25 degrees and mackerel bait; **OR** ii) 18/0 or larger circle hook with an offset not to exceed 10 degrees with mackerel bait. This alternative would maintain the current requirement for possession or use of non-stainless steel corrodible hooks for vessels participating in this fishery.

Alternative A10 *Open the NED to pelagic longline fishing and limit vessels with pelagic longline gear onboard in that area, at all times, to possessing onboard and/or using only one of the following combinations: i) 18/0 or larger circle hook with an offset not to exceed 10 degrees with mackerel bait; **OR** ii) 18/0 or larger non-offset (flat) circle hook with squid bait. (Preferred Alternative)*

This alternative would re-open the NED to pelagic longline fishing for Atlantic HMS and limit vessels with pelagic longline gear onboard in that area, at all times, to possessing and/or using no more than one of the following hook and bait combinations: i) 18/0 or larger circle hook with an offset not to exceed 10 degrees and mackerel bait; **OR** ii) 18/0 or larger non-offset (flat) circle hook and squid bait. This alternative would maintain the current requirement for possession or use of non-stainless steel corrodible hooks for vessels participating in this fishery.

Alternative A11 Prohibit the use of pelagic longline gear in Atlantic HMS fisheries.

This alternative would prohibit the use of pelagic longline gear by all U.S.-flagged vessels targeting HMS in the Atlantic Ocean. At this time, NOAA Fisheries believes that appropriate reductions in sea turtle interactions may be achieved through other measures examined in this document, with less significant adverse social and economic impacts, consistent with NS 8 under the MSA, which requires minimization of adverse economic impacts to the extent practicable. Therefore, this alternative is not further analyzed in this rulemaking but may be considered, if necessary and appropriate, in a future rulemaking.

Alternative A12 Prohibit the use of pelagic longline gear in HMS fisheries in the western Gulf of Mexico year-round (12 months).

This alternative would prohibit the use of pelagic longline gear by all U.S. flagged-vessels targeting HMS in the U.S. Exclusive Economic Zone (EEZ) of the western Gulf of Mexico (GOM), west of 88 degrees West longitude, where large numbers of sea turtles have been observed and reported caught, year-round. At this time, NOAA Fisheries believes that appropriate reductions in sea turtle interactions may be achieved through other measures examined in this document, with less significant adverse social and economic impacts, consistent with NS 8 under the MSA, which requires minimization of adverse economic impacts to the extent practicable. Therefore, this alternative is not further analyzed in this rule making but may be considered, if necessary and appropriate, in a future rulemaking.

Alternative A13 Prohibit the use of pelagic longline gear in HMS fisheries in an area of the central Gulf of Mexico year-round (12 months).

This alternative would prohibit the use of pelagic longline gear by all U.S. flagged-vessels targeting HMS in a portion of the central GOM, where large numbers of sea turtles have been observed and reported caught, year round. This closure would encompass approximately 25,489 nm² and would be defined as the area within the following coordinates, beginning with the northeastern corner and proceeding clockwise: 28°09' N. latitude (Lat.), 88°12' W. longitude (Long.); 27°06' N. Lat., 88°12' W. Long.; 25°46' N. Lat., 90°24' W. Long.; 26°17' N. Lat., 93°03' W. Long.; 26°51' N. Lat., 93°03' W. Long.; 28°09' N. Lat., 90°10' W. Long..

Alternative A14 Prohibit the use of pelagic longline gear in HMS fisheries in portions of the central Gulf of Mexico and the Northeast Coastal Statistical Reporting Area year-round (12 months).

This alternative would prohibit the use of pelagic longline gear by all U.S. flagged-vessels targeting HMS in portions of the central GOM and the Northeast Coastal Statistical Reporting Area (NEC), where large numbers of sea turtles have been observed and reported caught, year-round. These closures encompass approximately 56,471 nm² in aggregate. The GOM portion of the closure is identical to the GOM closure area in alternative A13 and would have the exact same boundary coordinates and area (25,489 nm²). The NEC portion of the closure would encompass approximately 30,982 nm² and would be defined as the area within the following coordinates beginning with the northeastern corner and proceeding clockwise: 41°08' N. Lat., 66°06' W. Long.; 38°37' N. Lat., 65°16' W. Long.; 37°25' N. Lat., 69°18' W. Long.; 39°55' N. Lat., 70°05' W. Long. This alternative, if used in combination with certain hook and bait options, would likely sufficiently reduce sea turtle interactions.

Alternative A15 Prohibit the use of pelagic longline gear in HMS fisheries in portions of the Central Gulf of Mexico and the Northeast Coastal Statistical Reporting Area from May through October (6 months).

This alternative would prohibit the use of pelagic longline gear by all U.S. flagged-vessels targeting HMS in portions of the central GOM and the Northeast Coastal Statistical Reporting Area (NEC), where large numbers of sea turtles have been observed and reported caught, from May through October (6 months). The GOM and NEC closure is identical to the area described in alternative A14, and the boundary coordinates are thus not repeated here.

Alternative A16 *Require vessels with pelagic longline gear onboard to possess or use dipnets and line clippers that meet newly revised design and performance standards, plus require these vessels to possess, maintain, and utilize additional sea turtle handling and release gear and comply with handling and release guidelines, as specified by NOAA Fisheries. (Preferred Alternative)*

This alternative would require vessel operators aboard all federally permitted vessels, or those required to be permitted, for Atlantic HMS with pelagic longline gear onboard to possess and maintain line cutters and dipnets meeting newly revised design and performance standards as well as require vessel operators to possess, maintain, and utilize additional equipment to facilitate the removal of fishing gear from incidentally captured sea turtles. This additional equipment would include: A- (1) long-handled line cutter; B- (1) long-handled dehooker for ingested hooks; C- (1) long-handled dehooker for external hooks (the long-handled dehooker for ingested hooks used for item B will also satisfy this requirement); D- (1) long-handled device to pull an “Inverted V” (if 6’ J-style dehooker is used for item C, it will also satisfy this requirement); E- (1) dipnet; F- (1) standard automobile tire; G- (1) short-handled dehooker for ingested hooks; H- (1) short-handled dehooker for removing external hooks (the short-handled dehooker for ingested hooks used for item G will also satisfy this requirement); I- (1) long-nose or needle-nose pliers; J- (1) monofilament line cutter; K- (1) bolt cutter; and, L- (2) types of mouth openers/mouth gags as discussed in Appendix B1.

Items A - D would be required for sea turtles not boated. Items E - L would be required for sea turtles boated. This equipment would be required to be used in accordance with the handling and release guidelines specified by NOAA Fisheries.

References Cited in Chapter 2

No references cited

